

Section 422

SECTION 422 BRIDGE APPROACH SLABS

422-1 DESCRIPTION

Construct reinforced concrete slabs at bridge approaches, including subgrade, base course, curbs and sidewalks; furnish and place temporary slope drainage systems and subsurface drainage systems; remove existing pavement or approach slab; furnish and place concrete, reinforcing steel, joint filler, sealer and other materials; finish and cure concrete.

Construct the approach slabs after the adjacent bridge deck is cast and before constructing concrete barrier rails or sidewalks.

422-2 MATERIALS

Refer to Division 10.

Item	Section
Corrugated Aluminum Alloy Pipe	1032-2
Corrugated Polyethylene (PE) Pipe	1044-7
Corrugated Steel Pipe	1032-3
Curing Agents	1026
Joint Filler	1028-1
Joint Sealer	1028-3
Portland Cement Concrete	1000
Reinforcing Steel	1070
Stone, No. 78M	1005
Subdrain Fine Aggregate	1044-1

422-3 CONSTRUCTION METHODS

Construct the subgrade in accordance with Section 500.

Construct the asphalt concrete base course in accordance with Section 610.

Apply Section 420 to all concrete except as otherwise provided herein. Use Class AA concrete.

Finish and groove the reinforced concrete bridge approach slabs in accordance with Article 420-14, except do not groove the approach slabs when grooving the bridge deck is not required.

When grooving is not required, apply a broomed texture to the approach slabs before the concrete becomes non-plastic. Cure bridge approach slabs in the same manner as specified for bridge decks in Subarticle 420-15(B).

Temporarily cover or fill the opening in the joint at the end bent until installation of the joint seal. Make sure that the covering or filler provides for drainage off the bridge deck and keeps debris out of the joint and off the end bent cap.

Shape the concrete curb to match the face of the barrier rail. Do not place the curb within the limits shown in the plans until after sawing the joint at the end bent. Give the concrete a light broom finish with brush marks parallel to the curb.

When shown in the plans, construct sidewalks on bridge approach slabs in accordance with plan details. Do not construct sidewalks until sawing the joint at the end bent. Finish the concrete in accordance with Subarticle 420-17(D).

Include in the temporary slope drainage system the earth ditch block, erosion resistant surface material, Class B stone for erosion control and the pipe. Locate it as shown in the plans.

Use either corrugated polyethylene, corrugated steel or corrugated aluminum alloy for the temporary drainage pipe. Do not use perforated pipe. Provide temporary pipe of sufficient length for complete drainage away from the roadway embankment.

Backfill the approach slabs as soon as practical to prevent erosion adjacent to the slab.

422-4 MEASUREMENT AND PAYMENT

The price and payment below will be full compensation for all items required to construct bridge approach slabs including, but not limited to, those items contained in Article 422-1.

Bridge Approach Slabs, Sta. ____ will be paid at the contract lump sum price.

Grooving bridge approach slabs will be paid at the contract unit price per square foot for *Grooving Bridge Decks* as provided in Article 420-21.

Payment will be made under:

Pay Item	Pay Unit
Bridge Approach Slabs, Sta. ____	Lump Sum

SECTION 425

FABRICATING AND PLACING REINFORCEMENT

425-1 DESCRIPTION

Furnish, fabricate and place steel reinforcement other than wire reinforcement, including all related materials such as tie wire, separators, wire bar supports, mechanical butt splices for reinforcing steel, and other material for fastening the reinforcing steel in place; galvanize and/or coat where required; and fabricate, cut, bend, place and splice the reinforcement in conformity with the shape and dimensions shown in the plans and as specified in these *Standard Specifications*. Provide epoxy coated reinforcing steel where indicated in the plans.

425-2 MATERIALS

Refer to Division 10.

Item	Section
Epoxy Coated Reinforcing Steel	1070-7
Epoxy Coated Spiral Column Reinforcing Steel	1070-8
Mechanical Butt Splices for Reinforcing Steel	1070-9
Reinforcing Wire	1070-3
Spiral Column Reinforcing Steel	1070-8
Steel Bar Reinforcement	1070-2
Wire Bar Supports	1070-4
Wire Reinforcement	1070-3

425-3 PROTECTION OF MATERIALS

Protect steel reinforcement at all times from damage and make sure it is free from dirt, dust, loose mill scale, loose rust, paint, oil or other foreign materials at the time of placement in the work.

Store epoxy coated reinforcing steel bars at the project site at least one foot above the ground on wooden or padded supports placed 10 ft apart, and completely cover with an opaque cloth, canvas or woven fiber reinforced polyethylene white tarp. Do not use solid plastic sheeting. Cover the bars such that adequate ventilation is provided to prevent condensation from forming on the material during storage, and completely protect the bars from direct sunlight. Do not allow water to pond under the epoxy coated reinforcing steel.

Store epoxy coated bars as close as possible to their final location in the structure to prevent coating damage from unnecessary handling.